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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/654,501	09/01/2000	Yuji Takahashi	PM 273792	7004
21254	7590	05/23/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			JACKSON JR, JEROME	
			ART UNIT	PAPER NUMBER
			2815	

DATE MAILED: 05/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

gm

Office Action Summary

Application No.

09/654,501

Applicant(s)

TAKAHASHI ET AL.

Examiner

Jerome Jackson Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-13, 16-22, 25-28, 30-34, 38-46 and 49-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-13, 16-22, 25-28, 30-34, 38-46 and 49-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 49,76,77 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The previous rejection still applies. Claim 1 recites fluorescent material resin in the cup portion with sealant above the light source (as in figure 1). Claim 49 recites fluorescent material resin above the sealant resin (as in figure 12). A perusal of figure 12 and its description in the specification will show that there is no fluorescent resin in the cup portion. Claim 49 appears to be an improper combination of the figure 1 and figure 12 embodiments. As such the exact intended structure is vague and indefinite. Claims 76 and 77 are rejected as "buffer" should be --barrier-- or else the structure is vague and indefinite.

Claims 1-3,6-10,21,22,26-28,30-34,38,40-42,59,61, 62,67,68,78,80,81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui and Nakamura.

The previous rejection still applies. The new limitations regarding an adhesive with fillers is obvious as Tsutsui shows in figure 5 a GaN emitter with reflector 11 attached to a metal substrate 3 with adhesive silver paste. See column 7. New claim 67 is not patentable as Soules teaches Y₂O₂S:Eu,Bi mixed with Ce phosphors. Therefore YOS:Ce phosphor is present. Furthermore, it is a common phosphor and unless applicant shows unexpected results over all the other phosphors of the Markush group it

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is considered obvious. Claim 68 is rejected as Nakamura teaches a transparent film of gold. Claims 78, 80 and 81 are rejected as Tsutsui teaches silver paste.

Claims 11-13,16-20,39, 60, 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura and further in view of Hampden-Smith.

The previous rejection with the above comments applies. Claim 79 is rejected as above for silver paste.

Claims 25, 69-71,73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura and further in view of Thompson.

The previous rejection with the above comments applies. Claim 69 is rejected as Thompson teaches multiple light emitters. Claims 70 and 71 are rejected as Nakamura teaches reflective layers as stated in the rejection. Claim 73 is rejected as Thompson teaches separate emitters one being a red emitter. The particular compound claimed is not unobvious as AlGaAs material for red emission is old in the art and one of the first materials to be practiced. Newer materials including GaN material emits in the elusive blue spectrum. GaAlAs material with GaN for non-organic based emitters to produce white light is obvious given the teachings of the applied art to practice a red emitter and blue emitter with a phosphor resin.

Claims 46,49,50,72,75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura, Hampden-Smith, and further in view of Komoto.

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The previous rejection with the above comments applies. Claim 72 is rejected as Komoto teaches multiple primary emitters. Claim 75 is rejected as Komoto teaches uniform or gradient dispersion of fluors to adjust for desired emittance.

Claims 43-45, 63-66, 82-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura, Hampden-Smith and further in view of Shimuzu.

The previous rejection still applies. Claims 82-85 are rejected as Tsutsui teaches silver paste as stated above.

Claims 51-58, 76, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura, Hampden-Smith, and further in view of Chiyo.

The previous rejection with the above comments applies. In regard to claims 76 and 77 Chiyo teaches InGaN wells and GaN barriers. Column 10 line 40.

Claims 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soules, Butterworth, Tsutsui, Nakamura, Thompson and further in view of Komoto.

Claim 74 is rejected as Komoto suggests separate cups for better heat transfer and reflection.

Applicant's arguments filed 3/10/05 have been fully considered but they are not persuasive. Arguments regarding the applied references as previously applied have been addressed in the remarks of the previous rejections of 5/25/04 and 12/10/04.

The new arguments against the references considered alone are unconvincing as one cannot show nonobviousness by attacking references individually where the

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rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regard to the new limitation of an adhesive, Ysutsui teaches such adhesive as shown above, the filler being silver in a resin similar to applicant's adhesive.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

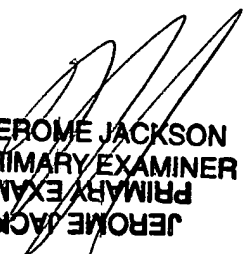
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Jackson Jr. whose telephone number is 571 272 1730. The examiner can normally be reached on t-th 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Thomas can be reached on 571 272 1664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jj


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